

AMENDMENTS TO THE CLAIMS

Listing of claims

1 (previously presented): A power on/off circuit apparatus, comprising:
a power on/off circuit for controlling an on/off supply of power to electronic components from an external power source;
a microcomputer connected to the power on/off circuit for controlling said power on/off circuit based on an operation input of a power switch;
a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer; and
a non-volatile memory for storing power on/off information just before said power switch is operated, the power on/off circuit connected to the non-volatile memory for controlling the on/off supply of power to the non-volatile memory, and said power switch being connected to said reset terminal.

2 (previously presented): The power on/off circuit apparatus according to claim 1, wherein when said power switch is operated, said microcomputer reads the power on/off information of said non-volatile memory to determine a power on/off state just before the power switch is operated, and writes a power-on information to said non-volatile memory while making a power-on operation if the microcomputer is in a power-off state, or, writes a power-off information to said non-volatile memory while making a power-off operation if the microcomputer is in a power-on state.

3 (canceled).

4 (canceled).

5 (canceled).

6 (previously presented) An electronic device including:

a power on/off circuit for controlling an on/off supply of power to electronic components of the device from an external power source;

a microcomputer connected to the power on/off circuit for controlling said power on/off circuit based on an operation input of a power switch;

a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer;

a non-volatile memory for storing a power on/off information just before said power switch is operated, the power on/off circuit connected to the non-volatile memory for controlling the on/off supply of power to the non-volatile memory, and said power switch being connected to said reset terminal, and

a power circuit connected to an AC power source and connected to the on/off circuit, wherein said power on/off circuit uses an output of said power circuit as a power source, and said microcomputer uses an output of said power circuit as a power source, and senses a key scan of a key matrix on which various input keys except said power switch are arranged, regardless of the on/off of power supply to the electronic components by said power on/off circuit.

7 (previously presented): The power on/off circuit apparatus according to claim1, further comprising:

a servo circuit connected to the power on/off circuit; and

an AV decoder circuit connected to the power on/off circuit.

8 (previously presented): A power on/off circuit apparatus, comprising:

a power on/off circuit for controlling an on/off supply of digital power to electronic components from an external power source;

a microcomputer connected to the power on/off circuit for controlling said power on/off circuit;

a power switch connected to a reset terminal of the microcomputer, said microcomputer configured to control said power on/off circuit based on an operation input of the power switch;

a reset circuit for giving a reset signal to the reset terminal of the microcomputer when a power is supplied to said microcomputer; and

a non-volatile memory for storing a power on/off information just before said power switch is operated, the power on/off circuit connected to the non-volatile memory for controlling the on/off supply of digital power to the non-volatile memory,

wherein the electronic components include:

a servo circuit connected to the power on/off circuit; and

an AV decoder circuit connected to the power on/off circuit.

9 (previously presented): The power on/off circuit apparatus according to claim 8, further comprising:

a power circuit connected to an AC power source; and

another power on/off circuit connected to the power circuit for controlling the on/off supply of digital power of a different level to other electronic components not connected to the first-mentioned power on/off circuit, and the microcomputer connected to the second-mentioned power on/off circuit for controlling the second-mentioned power on/off circuit.

10 (canceled).

11 (previously presented): The power on/off circuit device according to claim 6, further comprising:

a power circuit connected to an AC power source; and

another power on/off circuit connected to the power circuit for controlling the on/off supply of power of a different level to other electronic components not connected to the first-mentioned power on/off circuit, and said microcomputer connected to the second-mentioned power on/off circuit for controlling the second-mentioned power on/off circuit.

Claim 12 (new): A power on/off circuit apparatus, comprising:

a power on/off circuit for controlling an on/off supply of power to electronic components from an external power source;

a microcomputer connected to the power on/off circuit for controlling said power on/off circuit based on an operation input of a power switch;

a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer;

a non-volatile memory for storing power on/off information just before said power switch is operated, the power on/off circuit connected to the non-volatile memory for controlling the on/off supply of power to the non-volatile memory, and said power switch being connected to said reset terminal; and

a power circuit connected to an AC power source,

wherein said power on/off circuit uses an output of said power circuit as a power source, and said microcomputer uses an output of said power circuit as a power source, and senses a key scan of a key matrix on which various input keys except said power switch are arranged, regardless of the on/off of power supply to the electronic components by said power on/off circuit,

wherein when said power switch is operated, a reset terminal of said microcomputer is connected to a GND, and said microcomputer is reset to resolve a hang-up of the microcomputer,

wherein when the electronic components are operating in a power saving mode, said power on/off circuit prevents supplying power to the electronic components, and said microcomputer senses a key scan of the key matrix other than said power switch.

13 (new): The power on/off circuit apparatus according to claim 12, further comprising:

another power on/off circuit connected to the power circuit for controlling the on/off supply of power of a different level to other electronic components not connected to the first-mentioned power on/off circuit, and the second-mentioned power on/off circuit being connected to the microcomputer for being controlled by the microcomputer.